What is claimed is;

1.    A digital camera comprising:

an image-capturing device that captures a subject image;

5      an exposure control device that implements control on a length of exposure time to elapse while capturing the subject image at said image-capturing device;

an image generating device that generates a plurality of sets of image data through successive image-capturing

10    operations performed over varying exposure times by controlling said image-capturing device and said exposure control device; and

an image processing device that generates image data in which the blur has been corrected by implementing image

15    processing based upon the plurality of sets of image data generated by said image generating device.


2.    A digital camera according to claim 1, wherein:

said image generating device successively generates

20    first image data by capturing an image over a first exposure time and second image data by capturing an image over a second exposure time set longer than the first exposure time; and

said image processing device generates third image data in which the blur has been corrected by correcting at least

25    a high-frequency component of a spatial frequency contained

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in the second image data based upon the first image data and the second image data generated by said image generating device.

5    3.    A digital camera according to claim 2, wherein:

said exposure control device implements control so that the second exposure time is set to a length of time over which a correct exposure quantity that sets brightness of the image data to a correct level is achieved and so that the first

10   exposure time is set equal to or less than approximately 1/2 of the second exposure time.

4.    A digital camera according to claim 2, further comprising:

15   an image compression device that compresses the first image data at a first compression rate and compresses the second image data at a second compression rate higher than the first compression rate; and

a recording device that records the first image data

20   and the second image data having been compressed at said image compression device.

5.    A digital camera according to claim 2, further comprising:

25   a display control device that allows the second image

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data to be displayed at a display unit and disallows display of the first image data at the display unit.

6.    A digital camera according to claim 2, wherein:

said image processing device generates the third image data by correcting an amplitude and a phase of a spatial frequency component of the second image data based upon an amplitude ratio and a phase difference of the spatial frequency component of the first image data and the spatial frequency component of the second image data.

7.    A digital camera according to claim 2, wherein:

said image processing device divides both the first image data and the second image data into pixel data blocks each containing pixel data corresponding to a predetermined number of pixels, calculates an amplitude ratio and a phase difference of a spatial frequency component of the first image data and the spatial frequency component of the second image data in each pixel data block for each frequency, calculates an average amplitude ratio and an average phase difference of the spatial frequency components of the first image data and the second image data by averaging amplitude ratios and phase differences of the spatial frequency components in individual pixel data blocks that have been calculated and generates the third image data by correcting the amplitude

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and the phase of the spatial frequency component of the second

image data based upon the average amplitude ratio and the

average phase difference thus calculated.

5    8.    A digital camera according to claim 2, wherein:

said image processing device implements gradation

correction processing on the third image data if the third

image data that have been generated contain brightness data

indicating a value equal to or higher than a predetermined

10    value.

9.    A digital camera according to claim 2, wherein:

said image processing device implements processing the

third image data to increase a quantifying bit number thereof

15    if the third image data having been quantized at a

predetermined quantifying bit number contain brightness data

indicating a value equal to or higher than a predetermined

value.

20    10.    A digital camera according to claim 1, further

comprising:

a flash control device that controls a flash light

emitting unit to illuminate a subject at light emission

quantities in proportion to varying exposure times when

25    generating a plurality of sets of image data over the varying

exposure times at said image generating device.

11.  A digital camera according to claim 1, further
comprising:

5          a blur detection device that detects a blur manifesting
in image data based upon a plurality of sets of image data
generated at said image generating device, wherein:

said image processing device records one set of image
data among said plurality of sets of image data into a
10   recording medium without implementing image processing for
blur correction if the detection results obtained at said blur
detection device indicate that none of the plurality of sets
of image data manifest a blur, and executes image processing
for blur correction if a blur has occurred in one of the
15   plurality of sets of image data and records image data
obtained by correcting the blur into the recording medium.

12.  A digital camera according to claim 2, further
comprising:

20          a blur detection device that detects a blur manifesting
in the second image data based upon the first image data and
the second image data generated at said image generating
device, wherein:

said image processing device records the second image
25   data into a recording medium without implementing image

processing for blur correction if the detection results

obtained at said blur detection device indicate that the

second image data do not manifest any blur, and executes image

processing for blur correction if a blur has manifested in

5    the second image data and records third image data obtained

by correcting the blur into the recording medium.


13.    A digital camera according to claim 2, further

comprising:

10        a panning direction setting unit through which a panning

direction along which the second image data are captured is

set, wherein:

said image processing device changes details of image

processing implemented to generate the third image data in

15    correspondence to the panning direction set at said panning

direction setting unit.


14.    A digital camera according to claim 13, wherein:

said image processing device generates the third image

20    data primarily by correcting a spatial frequency component

along a vertical direction contained in the second image data

if horizontal panning is set at said panning direction setting

unit, and generates the third image data primarily by

correcting a spatial frequency component along the horizontal

25    direction contained in the second image data if vertical

panning is set at said panning direction setting unit.

15. A digital camera according to claim 2, further comprising:

a panning direction detection unit that detects a panning direction along which the second image data are captured, wherein:

said image processing device changes details of image processing implemented to generate the third image data in correspondence to the panning direction detected by said panning direction detection unit.

16. A digital camera according to claim 15, wherein:

said image processing device generates the third image data primarily by correcting a spatial frequency component along a vertical direction contained in the second image data if horizontal panning is detected by said panning direction detection unit, and generates the third image data primarily by correcting a spatial frequency component along a horizontal direction contained in the second image data if vertical panning is detected at said panning direction detection unit.

17. A digital camera according to claim 12, wherein:

said exposure control device implements control so that

the second exposure time is set to a length of time over which a correct exposure quantity that sets brightness of the image data to a correct level is achieved and so that the first exposure time is set equal to or less than approximately 1/2

·5 of the second exposure time.

18. A digital camera according to claim 13, wherein:

said exposure control device implements control so that the second exposure time is set to a length of time over which

10 a correct exposure quantity that sets brightness of the image data to a correct level is achieved and so that the first exposure time is set equal to or less than approximately 1/2 of the second exposure time.

15 19. A digital camera according to claim 15, wherein:

said exposure control device implements control on ? so that the second exposure time is set to a length of time over which a correct exposure quantity that sets brightness of the image data to a correct level is achieved and so that

20 the first exposure time is set equal to or less than approximately 1/2 of the second exposure time.

20. A digital camera according to claim 1, further comprising:

25 a detection unit that detects a photographing condition

of said digital camera which manifests a blur in image data

generated by said image generating device, wherein:

said image processing device executes image processing

for blur correction only when said detection unit detects the

5    photographing condition of said digital camera which

manifests a blur in the image data.


21.   An image processing system comprising:

a digital camera having an image-capturing device that

10    captures a subject image, an exposure control device that

controls the length of exposure time to elapse while capturing

the subject image at said image-capturing device and an image

generating device that engages said exposure control device

and said image-capturing device to successively generate

15    first image data by capturing an image over a first exposure

time and second image data by capturing an image over a second

exposure time set longer than the first exposure time; and

an image processing apparatus that generates third

image data by correcting at least a high-frequency component

20    of a spatial frequency contained in the second image data

based upon the first image data and the second image data

generated by said digital camera.


22.   An image processing system comprising:

25    a digital camera having an image-capturing device that

captures a subject image, an exposure control device that

controls the length of exposure time to elapse while capturing

the subject image at said image-capturing device and an image

generating device that engages said exposure control device

5    and said image-capturing device to successively generate

first image data by capturing an image over a first exposure

time and second image data by capturing an image over a second

exposure time set longer than the first exposure time; and

an image processing apparatus that detects a panning

10   direction along which the second image data have been captured

and generates third image data by correcting a spatial

frequency component contained in the second image data in

correspondence to the panning direction based upon the first

image data and the second image data generated by said digital

15   camera.


23.   A digital camera comprising:

an image-capturing device that captures a subject

image;

20      an exposure control device that implements control on

a length of exposure time to elapse while capturing the

subject image at said image-capturing device;

an image generating device that successively generates

first image data by capturing an image over a first exposure

25   time and second image data by capturing an image over a second

exposure time set longer than the first exposure time;

an image processing device that generates third image data in which a blur is corrected by correcting at least a high-frequency component of a spatial frequency contained in the second image data based upon the first image data and the second image data generated by said image generating device;

an image compression device that compresses the first image data at a first compression rate and compresses the second image data at a second compression rate higher than the first compression rate;

a recording device that records the first image data and the second image data having been compressed at said image compression device into a recording medium; and

a display control device that allows the second image data to be displayed at a display unit and disallows display of the first image data at the display unit, wherein:

said exposure control device implements control so that the second exposure time is set to a length of time over which a correct exposure quantity that sets brightness of the image data to a correct level is achieved and so that the first exposure time is set equal to or less than approximately 1/2 of the second exposure time;

said image processing device divides both the first image data and the second image data into pixel data blocks each containing pixel data corresponding to a predetermined

number of pixels, calculates an amplitude ratio and a phase difference of a spatial frequency component of the first image data and the spatial frequency component of the second image data in each pixel data block, calculates an average amplitude

5   ratio and an average phase difference of the spatial frequency components of the first image data and the second image data by averaging amplitude ratios and phase differences of the spatial frequency components in individual pixel data blocks that have been calculated and generates the third image data

10   by correcting the amplitude and the phase of the spatial frequency component of the second image data based upon the average amplitude ratio and the average phase difference thus calculated.

15   24.   A digital camera comprising:

an image-capturing device that captures a subject image;

an exposure control device that implements control on a length of exposure time to elapse while capturing the

20   subject image at said image-capturing device;

an image generating device that successively generates first image data by capturing an image over a first exposure time and second image data by capturing an image over a second exposure time set longer than the first exposure time;

25   an image processing device that generates third image

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data in which a blur is corrected by correcting at least a

high-frequency component of a spatial frequency contained in

the second image data based upon the first image data and the

second image data generated by said image generating device;

5      an image compression device that compresses the first

image data at a first compression rate and compresses the

second image data at a second compression rate higher than

the first compression rate;

a display control device that allows the second image

10  data to be displayed at a display unit and disallows display

of the first image data at the display unit, and

a blur detection device that detects the blur

manifesting in the second image data based upon the first

image data and the second image data generated at said image

15  generating device, wherein:

said exposure control device implements control so that

the second exposure time is set to a length of time over which

a correct exposure quantity that sets brightness of the image

data to a correct level is achieved and so that the first

20  exposure time is set equal to or less than approximately 1/2

of the second exposure time; and

said image processing device records the second image

data into a recording medium without implementing image

processing for blur correction if detection results obtained

25  at said blur detection device indicate that the second image

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data do not manifest any blur, whereas said image processing

device divides both the first image data and the second image

data into pixel each containing pixel data corresponding to

a predetermined number of pixels, calculates an amplitude

5     ratio and a phase difference of the spatial frequency

component of the first image data and the spatial frequency

component of the second image data in each pixel data block

for each frequency, calculates an average amplitude ratio and

an average phase difference of the spatial frequency

10    components of the first image data and the second image data

by averaging amplitude ratios and phase differences of

spatial frequency components in individual pixel data blocks

that have been calculated, generates the third image data by

correcting the amplitude and the phase of the spatial

15    frequency component of the second image data based upon the

average amplitude ratio and the average phase difference thus

calculated and records the third image data obtained by

correcting the blur into the recording medium.


20    25.    A digital camera according to claim 24, further

comprising:

a panning direction detection unit that detects a

panning direction along which the second image data are

captured, wherein:

25        said image processing device generates the third image

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data primarily by correcting a spatial frequency component

along a vertical direction contained in the second image data

if horizontal panning is detected by said panning direction

detection unit, and generates the third image data primarily

5    by correcting the spatial frequency component along a

horizontal direction contained in the second image data if

vertical panning is detected by said panning direction

detection unit.